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Page 1 of 6 77 8

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TECH CENTER 1600/2900

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 RAW SEQUENCE LISTING
 DATE: 11/22/2000

 PATENT APPLICATION: US/09/352,570
 TIME: 11:33:59

Input Set: A:\00398.506001.SEQLIST.TXT
Output Set: N:\CRF3\11222000\1352570.raw

4 <110> APPLICANT: Michael E. Mendelsohn 7 <120> TITLE OF INVENTION: METHOD FOR ASSAYING COMPOUNDS AFFECTING CELL DIVISION 10 <130> FILE REFERENCE: 00398/506001 12 <140> CURRENT APPLICATION NUMBER: 09/352,570 13 <141> CURRENT FILING DATE: 1999-07-13 15 <160> NUMBER OF SEQ ID NOS: 4 17 <170> SOFTWARE: FastSEQ for Windows Version 4.0 19 <210> SEQ ID NO: 1 20 <211> LENGTH: 618 21 <212> TYPE: DNA 22 <213> ORGANISM: Homo sapiens 24 <220> FEATURE: 25 <221> NAME/KEY: CDS 26 <222> LOCATION: (1)...(618) 28 <400> SEQUENCE: 1 29 atg geg etg cag etc tee egg gag cag gga atc acc etg ege ggg age 30 Met Ala Leu Gln Leu Ser Arg Glu Gln Gly Ile Thr Leu Arg Gly Ser $\overline{33}$ goo gaa ate gtg goo gag tte tte tea tte gge ate aac age att tta 34 Ala Glu Ile Val Ala Glu Phe Phe Ser Phe Gly Ile Asn Ser Ile Leu 96 20 25 30 37 tat dag ogt ggd ata tat dea tot gaa add tit act oga gtg dag aaa $38\ \mbox{Tyr}$ Gln Arg Gly Ile Tyr Pro Ser Glu Thr Phe Thr Arg Val Gln Lys 39 35 4.0 41 tac gga etc ace ttg ett gta act act gat ett gag etc ata aaa tac 42 Tyr Gly Leu Thr Leu Leu Val Thr Thr Asp Leu Glu Leu Ile Lys Tyr 55 $45\ \mathrm{cta}$ aat aat gtg gtg gaa caa ctg aaa gat tgg tta tac aag tgt tca 240 46 Leu Asn Asn Val Val Glu Gln Leu Lys Asp Trp Leu Tyr Lys Cys Ser 70 75 49 gtt cag aaa ctg gtt gta gtt atc tca aat att gaa agt ggt gag gtc 288 50 Val Gln Lys Leu Val Val Ile Ser Asn Ile Glu Ser Gly Glu Val 51 85 9.0 53 ctg gaa aga tgg cag ttt gat att gag tgt gac aag act gca aaa gat 54 Leu Glu Arg Trp Gln Phe Asp Ile Glu Cys Asp Lys Thr Ala Lys Asp 100 1.05 1.1.0 57 gac agt gca coc aga gaa aag tot cag aaa got ato cag gat gaa ato 58 Asp Ser Ala Pro Arg Glu Lys Ser Gln Lys Ala Ile Gln Asp Glu Ile 120 61 cgt tea gtg ate aga cag ate aca get acg gtg aca tit etg eca etg 62 Arg Ser Val Ile Arg Gln Ile Thr Ala Thr Val Thr Phe Leu Pro Leu 1.30 135 1.40 65 ttg gaa git tet tgt tea tit gat etg etg att tat aca gae aaa gat 66 Leu Glu Val Ser Cys Ser Phe Asp Leu Leu Ile Tyr Thr Asp Lys Asp 67 145 150 155 160 69 ttg gtt gta cet gaa aaa tgg gaa gag teg gga eea eag tit att ace 528

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```
70 Leu Val Val Pro Glu Lys Trp Glu Glu Ser Gly Pro Gln Phe Ile Thr
                 165
                                      170
                                                            175
73 aat tot gag gaa gtg ege ett egt toa tit act act.aca atc cac aaa
                                                                      576
74 Asn Ser Glu Glu Val Arg Leu Arg Ser Phe Thr Thr Thr Ile His Lys
                                   185
7.5
             180
                                                       190
77 gta aat agc atg gtg gec tac aaa att eet gte aat gae tga
                                                                      618
78 Val Asn Ser Met Val Ala Tyr Lys Ile Pro Val Asn Asp *
79 195
                               200
83 <210> SEQ 1D NO: 2
84 <211> LENGTH: 199
85 <212> TYPE: PRT
86 <213> ORGANISM: Homo sapiens
88 <400> SEQUENCE: 2
89\ \mathrm{Arg}\ \mathrm{Glu}\ \mathrm{Gln}\ \mathrm{Gly}\ \mathrm{Ile}\ \mathrm{Thr}\ \mathrm{Leu}\ \mathrm{Arg}\ \mathrm{Gly}\ \mathrm{Ser}\ \mathrm{Ala}\ \mathrm{Glu}\ \mathrm{Ile}\ \mathrm{Val}\ \mathrm{Ala}\ \mathrm{Glu}
91 Phe Phe Ser Phe Gly Ile Asn Ser Ile Leu Tyr Gln Arg Gly Ile Tyr
92 20
                                25 .
                                                      3.0
93 Pro Ser Glu Thr Phe Thr Arg Val Gln Lys Tyr Gly Leu Thr Leu Leu
94 35
                               40
95 Val Thr Thr Asp Leu Glu Leu Ile Lys Tyr Leu Asn Asn Val Val Glu
96 50
                         5.5
                                               60
97 Gin Leu Lys Asp Trp Leu Tyr Lys Cys Ser Val Gln Lys Leu Val Val
                      70
                                          75
99 Val Ile Ser Asn Ile Glu Ser Gly Glu Val Leu Glu Arg \operatorname{Trp} Gin \operatorname{Phe}
                                     90
                8.5
101 Asp Ile Glu Cys Asp Lys Thr Ala Lys Asp Asp Ser Ala Pro Arg Glu
               100
                                  1.05
103 Lys Ser Gln Lys Ala Ile Gln Asp Glu Ile Arg Ser Val Ile Arg Gln
                              120
                                                   125
1.04 115
105 He Thr Ala Thr Val Thr Phe Leu Pro Leu Leu Glu Val Ser Cys Ser
1.06 1.30
                   1.35
                                              1.40
107 Phe Asp Leu Leu Lie Tyr Thr Asp Lys Asp Leu Val Val Pro Glu Lys
108 145 150
                                           155
109 Trp Glu Glu Ser Gly Pro Gln Phe Ile Thr Asn Ser Glu Glu Val Arg
1.1.0
                 1.65
                               170
                                                  175
111 Leu Arg Ser Phe Thr Thr Thr Ile His Lys Val Asn Ser Met Val Ala
               180
                                    1.85
1.1.2
113 Tyr Lys Ile Pro Val Asn Asp
114
          195
117 <210> SEQ ID NO: 3
118 <211> LENGTH: 600
119 <212> TYPE: DNA
120 <213> ORGANISM: Ovis aries
122 <220> FEATURE:
123 <221> NAME/KEY: CDS
124 <222> LOCATION: (1)...(600)
126 <400> SEQUENCE: 3
1.27 cgg gag caa ggc atc acc ttg cgc ggg agc gcc gag atc gtg gcc gag
128 Arg Glu Gln Gly Ile Thr Leu Arg Gly Ser Ala Glu Ile Val Ala Glu
```

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```
131 the the tea tit ggt ate and agt att tha tat dag egt gge ata tat
132 Phe Phe Ser Phe Gly Tle Asn Ser Ile Leu Tyr Gln Arg Gly Ile Tyr
          20
                                25
135 cca teg gaa acc ttt act ega gtg eag aaa tat gga etc acc ttg ett
136 Pro Ser Glu Thr Phe Thr Arg Val Glu Lys Tyr Gly Leu Thr Leu Leu
137 35
                    40
                                             . 45
139 gta act act gat cet gag etc ata aaa tac eta aat aat gtg gtg gat
140 Val Thr Thr Asp Pro Glu Leu Ile Lys Tyr Leu Asn Asn Val Val Asp
                          55
                                            60
141 50
143 caa cta aaa gaa tgg tta tac aag tgt tca gtt cag aaa ctg gtg gta
                                                                240
144 Gln Leu Lys Glu Trp Leu Tyr Lys Cys Ser Val Gln Lys Leu Val Val 145 65 70 75 80
147 gtc atc tca aat att gaa agt gga gag gtc ctt gaa aga tgg cag ttt
148 Val Ile Ser Asn Ile Glu Ser Gly Glu Val Leu Glu Arg Trp Gln Phe
                  8.5
151 gat att gag tgt gac aag act gea aaa gat gac agt gea eee aga gaa
152 Asp Ile Glu Cys Asp Lys Thr Ala Lys Asp Asp Ser Ala Pro Arg Glu
153 100
                        1.05
                                                  1.10
155 aag tot cag aaa got ato caa gat gaa ato ogt toa gty ato aga cag
156 Lys Ser Gln Lys Ala Ile Gln Asp Glu Ile Arg Ser Val Ile Arg Gln
1.57 1.15
                     120
159 atc aca get aca gta aca ttt etg eca etg ttg gaa gtt tet tgt tea
160 Ile Thr Ala Thr Val Thr Phe Leu Pro Leu Glu Val Ser Cys Ser
161 130
                       135
                                  140
163 titt gat etc etc att tat aca gac aaa gat etg git gia eet gag aaa
                                                                480
164 Phe Asp Leu Leu Ile Tyr Thr Asp Lys Asp Leu Val Val Pro Glu Lys
165 145 150 155
167 tog qua gag too gga coa cag tto att acc aat tot gaa gaa gtt ogt
168 Trp Glu Glu Ser Gly Pro Gln Phe Ile Thr Asn Ser Glu Glu Val Arg
169
                 1.65
                                    170
                                                      175
171 ctt cgt tca ttc act act aca att cac aaa gta aat agc atg gta gcc
172 Leu Arg Ser Phe Thr Thr Ile His Lys Val Asn Ser Met Val Ala
      180
                              185
175 tac aaa att cot gto cat gac tga
                                                                600
176 Tyr Lys Ile Pro Val His Asp *
177
180 <210> SEQ ID NO: 4
181 <211> LENGTH: 199
182 <212> TYPE: PRT
183 <213> ORGANISM: Ovis aries
185 <400> SEQUENCE: 4
186 Arg Glu Gln Gly Ile Thr Leu Arg Gly Ser Ala Glu Ile Vai Ala Glu
1.87 .1 5
                                    10
188 Phe Phe Ser Phe Gly Ile Asn Ser Ile Leu Tyr Gln Arg Gly Ile Tyr
189 20
                       25
190 Pro Ser Glu Thr Phe Thr Arg Val Gln Lys Tyr Gly Leu Thr Leu Leu
191 35 40 45
192 Val Thr Thr Asp Pro Glu Leu Ile Lys Tyr Leu Asn Asn Val Val Asp
```



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193		50					55					60				
194	Gln	Leu.	Lys	Glu	Trp	Leu	Tyr	Ľуs	Cys	ser	Val.	Gl.n-	Lys	Leu	Val.	Val
195	65					7.0					75					8.0
196	Val	Lle	ser	Asn	T l.e	Glu	Ser	Gly	$\text{G.l.} \mathbf{u}^{\cdot}$	Val	Leu	Glu	Arg	Trp	Gln	Phe
197					85					90					95	
198	Asp	Ile	Glu	Cys	Asp	Lys	Thr	Ala	Lys	Asp	Asp	Ser	Ala	Pro	Arg	G.l.u
199				100					105					110		
200	Lys	ser	G l,n	Ľуs	A.l.a	Tle	Gl.n	Asp	G.l u	Tle	Arg	Ser	Va.l.	Ile	Arg	Gln
201			.1 1.5					1.20					125			
202	He	Thr	Ala	Thr	Val	Thr	Phe	Leu	pro	Leu	Leu	Glu	Val	ser	Cys	Ser
203		130					135					140				
204	Phe	Asp	Leu	Leu	Tle	Tyr	Thr	Asp	Lys	Asp	Leu	Val	Va.l.	Pro	Glu	ГЛЯ
205	1.45					1.50					155					160
	Trp	Glu	Glu	ser	_	P.ro	Gln	Phe	I l.e	Thr	Asn	ser	Glu	GLu	Val	Arg
207					165					170					1.75	
	Leu	Arg	ser		Thr	Thr	Thr	Tle	His	Lys	Val	Asn	ser	Met	Val	Ala
209				180					185					190		
	Tyr	Lys		Pro	Val	His	Asp									
211			195													

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/352,570

DATE: 11/22/2000 TIME: 11:34:01

Input Set : A:\00398.506001.SEQLIST.TXT
Output Set: N:\CRF3\11222000\I352570.raw